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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,434	10/20/2005	Alexander Jurmann	038724.55803US	1750
23911 7590 03/18/2008 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP			EXAMINER	
			KASTLER, SCOTT R	
P.O. BOX 14300 WASHINGTON, DC 20044-4300			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			03/18/2008	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Comments	10/521,434	JURMANN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Scott Kastler	1793					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on							
	action is non-final.						
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.	4) Claim(s) 1-8 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-8</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 2/8/2005.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ite					

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## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The above claim recites a list of hydrocarbon treatment gases to be employed which contains the term "derivatives of the aforementioned". This term does not clearly close of define the group of gases since it is not clear what is meant by "derivatives", thereby rendering the scope of the claim unascertainable.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,232,852 to Limque et al (Limque et al'852). Limque et al'852 teaches a method and apparatus for carburizing at sub-atmospheric pressures with a hydrocarbon gas supplied to a treatment chamber (11) where the "opacity" of the atmosphere in the treatment chamber is determined through the use of a sensor system and the hydrocarbon treatment gas stream is regulated based upon the detected opacity (see the claims for example) thereby showing all aspects of the above

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claims, since the detection of the soot mist formation cited by Limque et al'852 is the same as the opacity measurement of the instant claims.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Limque et al'852. As applied to claim 1 above, Limque et al'852 shows all aspects of the above claim except the use of the specifically recited pressure level range (3-20 mbar), although Limque et al'852 does broadly encompass this pressure range (Limque et al'852 allows of and sub-atmospheric pressure). It has been well settled that where, as in the instant case, no new or unexpected result is shown to arise therefrom, motivation to select a particular narrower range within a broader range of values disclosed by the prior art as equally useful, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made. See MPEP 2144.05. In the instant case, motivation to select any desired equally useful sub-atmospheric pressure range as the furnace pressure for Limque et al'852, including pressures between 3 and 20 mbar, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jurmann et al (the published patent document of the current application) is also cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott Kastler/ Primary Examiner, Art Unit 1793

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